

04/08/14 Agenda

- Polynomials - day 12
 - Factoring Trinomials where $A \neq 1$

Homework

- Worksheet 8 - Factoring ($a \neq 1$)

Warm Up



Put your name on a slip of paper.

Put the equations in standard form, then factor them

$$Ax^2 + Bx + C$$

$$12x + 35 + x^2$$

$$\boxed{x^2 + 12x + 35}$$

$$1 \cdot 35 = 35$$

a · c

$$a = 1$$

$$b = 12$$

$$c = 35$$

FACTORS
OF 35

$$1 + 35 = 36$$

$$5 + 7 = 12$$

12

b

$$(x + 7)(x + 5)$$

$$x^2 + 5x + 7x + 35$$

$$x^2 + 12x + 35$$

$$(x + 5)(x + 7)$$

Warm Up



Put your name on a slip of paper.

Put the equations in standard form, then factor them

$$Ax^2 + Bx + C$$

$$8x + x^2 - 35 - 10x$$

$$x^2 + 8x - 10x - 35$$

$$1x^2 - 2x - 35$$

$$1 \cdot -35 = -35$$

$$a = 1$$

$$b = -2$$

$$c = -35$$

$$\begin{array}{l|l} a \cdot c & \\ \hline -1, 35 & = 34 \end{array}$$

$$\begin{array}{l|l} -5, 7 & b = -2 \end{array}$$

$$\begin{array}{l|l} 1, -35 & = -34 \end{array}$$

$$\begin{array}{l|l} 5, -7 & = -2 \end{array}$$

$$(x+5)(x-7)$$

1.) $a^2 - 14a + 45$

45	-1
-5	-9

$-14 \quad -14$

$(a-5)(a-9)$

2.) $n^2 + 7n - 18$

-18	1+
-2	9

$=7+7$

$(n-2)(n+9)$

$$3.) \quad \underline{-x^2 + x + 2} \quad -1(x^2 - x - 2)$$

$$x^2 - x - 2 \quad (-1)(x \quad)(x \quad)$$

$$4.) \quad -v^2 + 2v + 24$$

$$\begin{array}{rcl}
 & 3x^2 - 7x - 6 & (\underline{3}x - 9)(x + 2) \\
 a & 3 & +6x - 9x \\
 & -18 & \\
 b & -7 & -7 \quad -3x \\
 c & -6 &
 \end{array}$$

The diagram shows the coefficients of the quadratic expression $3x^2 - 7x - 6$ and the corresponding terms from the factored form $(3x - 9)(x + 2)$. The coefficients are listed on the left, and the terms are listed on the right. The term -18 is circled, and the term -9 is circled.